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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application:

Application No.: 10/619,114

Filed: 07/14/2003

Title: Narrow Width Effect Improvement with Photoresist Plug Process and STI Corner Ion Implantation

Commissioner for patents

Washington, D.C. 20231

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST
(REVOCATION OF PRIOR POWERS)

REVOCATION OF PRIOR POWERS OF ATTORNEY

the power of attorney previously given is hereby revoked, and

NEW POWER OF ATTORNEY

the following attorneys/agents are hereby appointed to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

24504

Patent Trademark Office

Please direct all future correspondence and telephone calls to:

Daniel R. McClure, Reg. No. 38,962

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

100 Galleria Parkway, Suite 1750

Atlanta, Georgia 30339

770-933-9500

ASSIGNEE OF ENTIRE INTEREST

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.

8, Li-Hsin Rd. 6

Hsinchu Science Park

Hsinchu, Taiwan 300-77, R.O.C.

ASSIGNEE CERTIFICATION

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same. Further, in my official position with Taiwan Semiconductor Manufacturing Company, Ltd., I am authorized to sign documents and otherwise act on its behalf in connection with the management and handling of patent applications and other intellectual property matters.

Date:

June 17, 2007

Chien-Wei (Chris) Chou

Director - Intellectual Property Division



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Sheu et al.

Application Serial No.: 10/619,114

Filed: July 14, 2003

For: Narrow Width Effect Improvement with Photoresist Plug Process and STI Corner Ion Implantation

Patent No.:

Issue Date:

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

**CERTIFICATE UNDER 37 C.F.R. §3.73(b)
ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION**

1. The assignee of the entire right, title and interest hereby seeks to take action in the PTO in this matter.

IDENTIFICATION OF ASSIGNEE

2. The assignee of this matter is:

TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.

8, Li-Hsin Rd. 6

Hsinchu Science Park

Hsinchu, Taiwan 300-77, R.O.C.

PERSON AUTHORIZED TO SIGN

3. Daniel R. McClure
Attorney for Assignee

4. A chain of title from the inventor(s) to the current assignee is shown below:

- a. From:
To:
Recorded in PTO: Reel: Frame:
- b. From:
To:
Recorded in PTO: Reel: Frame:

Recorded in PTO: See Attached evidencing assignment that
has already been filed. No Reel and Frame has been assigned as of yet.

DECLARATIONS

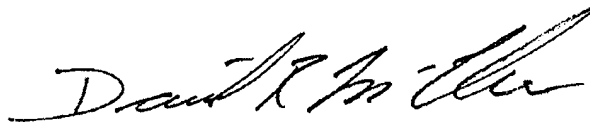
5. I, the undersigned, have reviewed all the documents in the chain of title of the

- ☒ application
☐ patent

matter identified above and, to the best of my knowledge and belief, title is in the assignee identified above.

6. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

7. I, the person signing below, aver that I am empowered to sign this statement on behalf of the assignee.

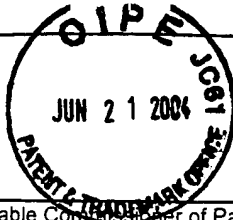


Daniel R. McClure, Reg. No. 38,962

Tel. No. 770-933-9500
Customer No.: 24504

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**
100 Galleria Parkway, Suite 1750
Atlanta, Georgia 30339-5948

Docket No. 252016-1300



PATENTS ONLY

TS02-1050

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

YI-MENG SHEU, DA-WEN LIN, CHENG-KU CHEN,
PO-YING YEH, SHI-SHUNG PENG, CHUNG-CHENG
WUAdditional name(s) or conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance



Assignment



Merger



Security Agreement



Change of Name



other _____

Execution Date: 5/13/03

2. Name and address of receiving party(ies):

Name: Taiwan Semiconductor Manufacturing
Company

Internal Address:

Street Address:

No. 8, Li-Hsin Rd. 6
Science-Based Industrial Park
Hsin-Chu, Taiwan 300-77
Taiwan, R.O.C.Additional name & address attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s): 10/619,114

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s)B. Patent No.(s)Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence
concerning document should be mailed:Name: GEORGE O. SAILE

Internal Address: _____

Street Address: 28 DAVIS AVENUECity: POUGHKEEPSIE State: NY ZIP: 126036. Total no. of applications and patents involved: 17. Total fee (37 CFR 3.41): \$ 40.00

Enclosed



Authorized to be charged to deposit acct.

8. Deposit account number: 19-0033

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature .

To the best of my knowledge and belief the foregoing information is true and correct and any attached copy is a true copy
of the original documentSTEPHEN B. ACKERMAN

Name of Person Signing

Signature

12/22/03

Date

TS02-1050

For ☒ U.S. and/or ☒ Foreign Rights

For ☒ Application or ☐ U.S. Patent

By ☒ Inventor(s) or ☐ Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:

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Nationality

ASSIGNEE:

Taiwan Semiconductor Manufacturing Co. Ltd.

No. 6, Li-Hsin Rd. 6

Science-Based Industrial Park

Hsin-Chu, Taiwan 300-77 R.O.C.

Taiwan, R.O.C.

Nationality

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

☒ the entire right, title and interest

☐ an undivided _____ percent (____%) interest for the United States and its territorial possessions
(check the following box if foreign rights are also to be assigned)

☒ and in all foreign countries

in and to any and all improvements which are disclosed in the invention entitled:

Narrow Width Effect Improvement With Photoresist Plug Process And Sti Corner Ion Implantation

TS02-1050

For ☒ U.S. and/or ☒ Foreign Rights

For ☒ Application or ☐ U.S. Patent

By ☒ Inventor(s) or ☐ Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:

SHI-SHUNG PENG

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R.O.C., Republic of China,

Nationality

Taiwan

CHUNG-CHENG WU

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No. 19, Lane 177, Shi-Pin Road,

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Hsin-Chu, Taiwan

R.O.C., Republic of China, Taiwan

Nationality

ASSIGNEE:

Taiwan Semiconductor Manufacturing Co. Ltd.

No. 6, Li-Hsin Rd. 6

Science-Based Industrial Park

Hsin-Chu, Taiwan, 300-77 R.O.C.

Taiwan, R.O.C.

Nationality

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

☒

the entire right, title and interest

☐

an undivided _____ percent (____%) interest for the United States and its territorial possessions
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☒

and in all foreign countries

in and to any and all improvements which are disclosed in the invention entitled:

Narrow Width Effect Improvement With Photoresist Plug Process And Sti Corner Ion Implantation

and which is found in

- (a) ☒ U.S. patent application executed on even date herewith
(b) ☐ U.S. patent application executed on _____
(c) ☐ U.S. application serial no. _____ filed on _____
(d) ☐ U.S. patent no. _____ issued _____
(e) ☒ and any legal equivalent thereof in a foreign country, including the right to claim priority
(also check (e) if foreign application(s) is also being assigned)

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute, thereof, and as to letters patent any re-issue or re-examination thereof.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I / We have signed this

May-13 2003 (Date of signing)

WARNING (Date of signing must be the same as the date of execution of the application if item (a) was checked above.

Yi-Ming Shen
Signature of ASSIGNOR(S)
Da-Wen Lin
Bo-ying Yeh
Cheng-Ku Chen

If ASSIGNOR is a legal entity complete the following information

Type or print the name of the above person authorized to sign on behalf of ASSIGNOR

Title

Note: No witnessing, notarization or legalization is necessary, if the assignment is notarized or legalized then it will only be prima facie evidence (35 USC 261). Use next page if notarization is desired.

Notarization of Legalization Page Added.

and which is found in

- (a) ☒ U.S. patent application executed on even date herewith
(b) ☐ U.S. patent application executed on _____
(c) ☐ U.S. application serial no. _____ filed on _____
(d) ☐ U.S. patent no. _____ issued _____
(e) ☒ and any legal equivalent thereof in a foreign country, including the right to claim priority
(also check (e) if foreign application(s) is also being assigned)

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute, thereof, and as to letters patent any re-issue or re-examination thereof.

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IN WITNESS WHEREOF, I / We have signed this

May - 13, 2003 (Date of signing)

WARNING: Date of signing must be the same as the date of execution of the application if item (a) was checked above.

Yi-Ming Shen
Signature of ASSIGNOR(s)

Da-Wen Lin

Pe-yung Yeh

Shi-Shang Peng

Chung-Cheng Wu ✓

If ASSIGNOR is a legal entity complete the following information

Type or print the name of the above person authorized to sign on behalf of ASSIGNOR

Title

Note: No witnessing, notarization or legalization is necessary, if the assignment is notarized or legalized then it will only be prima facie evidence (35 USC 261). Use next page if notarization is desired.

Notarization or Legalization Page Added.